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Chair

Mr. James Maloney

Standing Committee on Natural Resources

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● (0850)

[*English*]

The Chair (Mr. James Maloney (Etobicoke—Lakeshore, Lib.)): Good morning, everybody, and welcome. Thank you for joining us today.

In our first hour, we have with us, appearing as an individual, Monica Gattinger, a professor from the University of Ottawa. By video conference, we have Judith Dwarkin and Ian Nieboer from RS Energy Group.

Thank you very much for joining us.

The process is that each group will be given up to 10 minutes to make a presentation, which you can do in either official language or both. You have equipment there for translation should you need it. You'll probably get questions in French and in English.

Ms. Gattinger, since you're here, why don't we start with you?

Professor Monica Gattinger (Professor, Chair of Positive Energy, Director of Institute for Science, Society and Policy, University of Ottawa, As an Individual): Thank you very much, Mr. Chair. It's an honour to appear before the committee this morning.

[*Translation*]

I'm going to give my presentation in English, but please feel free to ask me questions in French.

[*English*]

I am chair of an initiative at the University of Ottawa that is called "Positive Energy", which some of you might be familiar with. It's a research and engagement initiative that uses the convening power of the university and solution-focused applied research to identify how to strengthen public confidence in energy decision-making.

My testimony this morning represents over three years of research and engagement, including research and engagement on the role of information in strengthening public confidence in energy decision-making. In particular, I want to note the contributions to my presentation today of a number of members of the Positive Energy research team: Rafael Aguirre, Dr. Marisa Beck, Professor Stephen Bird, Mike Cleland, Professor Bryson Robertson, and Professor Louis Simard.

I have four overarching messages for the committee today.

The first is that the status quo when it comes to energy information is woefully inadequate. The lack of robust and credible energy information creates a vacuum that is often utilized to spread misinformation or biased information.

My second message is that the focus of an energy information system needs to be on information, not solely on data. Data is essential, but transforming data into information that's both relevant and accessible is key.

My third message today is that information needs will grow exponentially in the coming years, notably as a result of Canada's transition to a lower-carbon energy system. Any information system needs to be designed with those long-term needs in mind.

Last but not least, when it comes to energy information, the credibility of the energy information system needs to be job one. Credibility of information is paramount. Independence is crucial.

The remainder of my testimony will respond to the committee's questions about benefits, users and needs, gaps, best practices, and recommendations when it comes to energy information. The four messages I've just shared with you will emerge from those comments.

First, when it comes to benefits, what is the overarching benefit of an energy information system?

An energy information system is essential to anchor evidence-based decision-making and public confidence in Canada's energy decision-making. How will Canadians trust energy decision-making if leaders don't know what they're talking about or don't know the limitations of the data and the information that they're talking about?

How can Canadians have rational discussions about energy projects if they don't trust the information upon which project approvals have been based? How will Canadians know how to contribute to energy transition if they don't have the appropriate information upon which to make personal choices? Also, how can Canada position itself in global energy markets if it doesn't have adequate performance metrics to tell its energy story?

All these questions are key.

In other words, information is pivotal to the ongoing development of Canada's energy system, energy resources, and energy projects, and the needs are only going to grow in the years ahead. Think energy transition. Think artificial intelligence and things like automated vehicles and smart homes. Think distributed energy systems, where people aren't just consumers but also producers of energy. All of these processes need to be informed by information.

The committee also asked about users and their needs when it comes to energy information. We can think about both traditional users and new users when it comes to energy information.

Traditional users are fourfold: policy-makers, who need information to inform decisions now and into the future; regulators, who also need information in order to make decisions; industry, which needs information to inform decisions with respect to investment, divestment, new market opportunities, and the like; and academia. Academics can be an independent voice in energy decision-making, but they need access to data and information to drive knowledge generation.

There are also new users when it comes to energy information, and we've been spending a lot of our time at Positive Energy focused on these new users. The first are individuals, both as consumers and as citizens. People are becoming far more engaged in their energy lives and they want energy information. We've undertaken public opinion research and our most recent survey results find that more than eight out of 10 Canadians support, or somewhat support, the creation of an agency to provide independent, diverse, and accessible information, related to energy, to those making decisions about energy in Canada.

The second group of new users are municipalities, indigenous communities, and non-governmental organizations, all of whom are increasingly engaged in energy decision-making, as we've been seeing over the last number of years.

What do users need? Users need clear, accessible, timely, relevant, and credible information.

The committee also asked about gaps in energy information. The gaps are numerous. In my opinion, it's an embarrassment that researchers like me go to the United States Energy Information Administration for energy information about Canada. There are multiple gaps in the system. I'll mention a few of them here today.

There are gaps in transforming data into information. There are mountains of data in various organizations that aren't being transformed into information. There are gaps in coordination and harmonization of data. Different definitions are being deployed in different organizations. There are gaps in flexibility in the ability for organizations to be more proactive when it comes to holding public meetings or taking initiative to conduct particular studies on energy information.

There are gaps in accessibility. Presenting information in accessible ways on user-friendly platforms is extremely important. There are gaps in understanding, when it comes to new and emerging energy business models and decision-making approaches in Canada. Finally, there are gaps in credibility. Where does information come from that's viewed as credible, by various parties?

The committee also asked about best practices. I would draw the committee's attention, if it's not already aware, to the United Nations Statistical Commission's international recommendations on energy statistics, which put forward a number of best practices and principles when it comes to energy information: relevance and completeness, timeliness and punctuality, accuracy and reliability, coherence and comparability, accessibility and clarity, and political independence.

Finally, the committee asked for recommendations to the Government of Canada. I would like to come back to the four main messages that I began this presentation with.

As I noted, the first is that the status quo is woefully inadequate. Building an energy information system in Canada is not a greenfield operation, but it does require substantial additional attention. The current system, such as it is, does have a lot of expertise, but it's distributed across multiple agencies. Any reform should aim to maintain and leverage existing expertise and tailor Canada's system to the country's local circumstances.

The second is that information needs will grow exponentially in the coming years. Any reforms to Canada's energy information system need to be designed with long-term needs in mind.

Third, the focus needs to be on information, not just on data. Data is essential, but transforming data into information that's both relevant and accessible is crucial.

Finally, the credibility of the energy information system needs to be job one. In Canada, as elsewhere, there are lower levels of public trust in government, industry, expertise, and the like. People look closely at organizational mandates, leadership, and decision-making processes and form their judgments about the credibility of information from there. Funding to energy information systems needs to be consistent and the long term, and beyond short-term political imperatives.

My final note would be to say that energy information might not be the sexiest of energy policy issues, but it is absolutely essential as we move forward in Canada on energy.

Thank you.

● (0855)

The Chair: Thanks very much.

It's your turn.

Ms. Judith Dwarkin (Chief Economist, RS Energy Group): Good morning. Thank you for inviting us to address you.

My comments today are organized in response to the five questions posed by the committee. As will quickly become apparent, I will be speaking to you from the perspective of someone who is daily battling in the trenches with the data, attempting to squeeze out analytical insights and usable information.

My colleague, Ian Nieboer, will follow with some advice to you on some more aspirational goals with respect to establishing a national energy data bank for Canada.

What are the benefits of national energy data? Obviously, good decisions are built on good data, be this in the public or the private realm. Good data are accurate, timely, consistent, and comprehensive, and they come in a user-friendly format. A lack of data, or unreliable data, undermines good analysis and understanding and, therefore, good decision-making. It also impedes informed debate.

Who uses national energy data, and are their needs being met? Analysts in the public and private sectors use energy data to research energy supply, demand, logistics, price, market behaviour, and environmental issues. Decision-makers rely on this research, or at least they ought to, to make good policy and commercial choices. Canadian citizens use these data to try to gain understanding about issues in and about the energy sector.

In our view, Canada at present lacks a comprehensive, consistent, timely, and easily accessible source of national energy data. The default entails seeking out multiple, often conflicting, incompatible, incomplete data from other entities, including provincial agencies, industry organizations, and commercial data providers.

You asked if there are gaps in the national energy data that are currently available. From our perspective, there are gaps in what's currently available, and the vision has been already put to you for a Canadian energy information agency. These gaps relate to the data coverage, it's timeliness and frequency of reporting, the degree of granularity in the data, serious continuity, consistency in definitions across databases, and ease of access and use.

What are our recommendations with regard to best practices for managing, acquiring, and sharing energy data? We would reiterate the recommendation made to you by the expert panel a year ago: that a new Canadian energy information agency be created. The U.S. Energy Information Administration is the obvious model to follow in this particular effort. This agency is regarded as an authoritative, non-partisan, and trustworthy source of data, in part because it's been doing it for a long time, but also because it's relatively transparent about how it collects and compiles the data it publishes. It also is fairly quick to supplement the information it provides in response to emerging issues in the sector.

The NEB's initiative, Canadian energy data links, is a step in the right direction toward a one-stop shop for basic national energy data, but much more needs to be done in terms of collecting, curating, and collating Canadian energy data and disseminating them in a consistent and accessible format.

Our fundamental recommendation to you is to provide the National Energy Board with the resources it needs to develop the Canadian energy data links portal into the Canadian version of the U. S. EIA data service. This effort should include canvassing data users in the public and private domains for their specific data requirements in terms of coverage, frequency, and formatting.

Some consultation with the EIA itself would be essential in planning Canada's energy data system, which would benefit from this agency's experience, and it would start the Canadian version off on a solid footing.

Lastly, since using both Canadian and U.S. data sources together is often beneficial, making Canada's system as compatible as possible with the U.S. version would be a worthwhile goal.

● (0900)

Mr. Ian Nieboer (Director, RS Energy Group): I will continue. I think this discussion is rightly focused on the benefits and value that an information agency in Canada could provide and how we might get there. Judith and the other presenters have talked, I think, a great deal about the immediate shortcomings of Canadian data, and I would like to focus on imagining the future and the possibilities that such an agency could deliver on.

The first tenet, and I think grounding for this presentation, is that an aspiration of the Canadian energy information agency should be to lay the foundation for an energy-focused big data industry. That means building on the five dimensions of big data.

First is volume. How can we collect more types of data with longer histories?

Second is velocity. How can we collect it more frequently? How current is it? Is it from this month, this week, or today? Once it's collected, how can we make it easier and faster to access?

Third is variety. How do we find additional sources and types of data, and how do we make them available?

Fourth is veracity. Is it accurate and complete? Is it presented consistently?

By answering these questions, we get to the heart of the matter: the value that this data can provide and what is really the impact on the broader industry and our economy.

With respect to value, allow me to speak from the narrow perspective of our firm, RS Energy Group. We are a Calgary-based intelligence firm, and we serve many of the largest asset owners, financial institutions, and investors in the energy industry. Our business is built on providing insight and analysis to our clients that is based on a quantitative assessment of the industry. This means exploiting big datasets with the tools of data science and under the guidance of subject matter experts from geology, engineering, finance, and economics.

This type of work supports asset owners such as exploration and production companies and pipeline operators to make better business decisions about where to invest and how to position their companies. As a result, our domestic asset owners become more competitive amongst their global peers. This promotes employment and supports the sustainability of these businesses, many of whom are national champions on the global stage.

For our global investor clients, this work gives them greater transparency into the risks and opportunities associated with the investments they are making. This transparency reduces the cost of capital associated with Canadian opportunities and enhances the competitiveness of our assets.

To achieve these goals, we and our competitors rely on public and proprietary data sources. Those jurisdictions with greater endowments of data offer additional opportunities, while those with more poorly developed data resources are comparatively disadvantaged.

Over the last few years, we have seen a move to greater availability and quality of data in many jurisdictions including the U. K., Mexico, and Brazil. These countries compete directly with Canada for capital and in the energy landscape. Data is a national resource that is no different from our natural resources like energy, water, minerals, metals, or timber. If developed appropriately, it has the potential to yield enormous value for all Canadians. Our natural resource endowment provides leverage to the value of this data. Allow me to explain.

A small increase in understanding may result in a small change in the value of a barrel of oil or a thousand cubic feet of gas. However, this benefit is amplified by our country's vast natural resource base. Even a few cents of value per unit multiplied by the billions of barrels or billions of cubic feet of gas resource we possess could result in hundreds of millions of dollars of incremental value for all Canadians. This provides an incentive for businesses like ours to pursue new opportunities. It enables us to hire and retain skilled labour like computer and data scientists. It allows us to advance the tools of the new age—big data, artificial intelligence, and predictive analytics—which we in turn export to the world.

In addition, we have an existing endowment of data in this country. Provinces like Alberta have been collecting and making data available publicly for decades. However, differences between provinces' agencies suggest that a national agency is required to harness the potential value of this data resource. Such a move would begin to address the immediate shortcomings that Judith has described, uninformed debate, inferior decision-making, inefficient and costly data aggregation, data gaps and lags, etc. Think of this as basic infrastructure that smooths the flow of everything from commerce to social discourse.

Longer term, a national agency committed to delivering Canadian energy-focused big data and volume with velocity, and variety, and with veracity, offers additional value. Our national champions become more competitive. Our energy assets gain access to additional capital. We foster intellectual capacity in disciplines like computer and data science, and we allow new businesses and champions like ours to emerge.

● (0905)

Thank you.

The Chair: Thank you.

I neglected to say thank you at the beginning too. I realize you're in Calgary so we appreciate your getting up so early to join us.

Mr. Ian Nieboer: No worries.

The Chair: Mr. Serré, you're going to start us off.

[*Translation*]

Mr. Marc Serré (Nickel Belt, Lib.): Thank you, Mr. Chair.

I'd like to thank the witnesses for their preparation for this meeting and their time today.

Of course, we are proud of Canada's energy system. Internationally, Canada is a leader; we are among the top energy producers and consumers in the world.

As two of today's witnesses also mentioned, Canada needs more data. I don't think we've had a witness who hasn't said that. We are talking about data that go back 50 years, not two and a half years. We've heard a lot about the need to establish an independent system, as the U.S. has. Politically, however, that's hard to put in place because it's so expensive. Setting up a national energy centre would be hard on a political level, given that certain parties don't want to invest in something like that.

If we stay in the realm of a more independent system, is there another model we could adopt?

On both sides, people seem to be rather inflexible in their ideology. There is no moving. Be that as it may, we don't have enough data.

If we don't create a national research centre, what can we do in the short term to create a better system and enrich our capacity, possibly in conjunction with Statistics Canada, the National Energy Board, Natural Resources Canada, and other organizations?

● (0910)

Prof. Monica Gattinger: Thank you for the question.

You raise a fundamentally important point. Something you didn't mention, but was implied in the question, was federalism. Under the Canadian Constitution, most energy-related issues are in the provincial domain. A number of organizations, even at the provincial level, have data. The Bureau d'audiences publiques sur l'environnement and the Alberta Energy Regulator come to mind, for instance. Building a strictly national system would therefore be challenging in a country like Canada.

That said, it would be possible to set up some sort of pan-Canadian initiative. Although a somewhat different approach, it is one that I think could leverage all existing data in the country. There could be a one-stop shop, or single window, if you will, where Canadians and the full spectrum of stakeholders could turn to access the data. Currently, that information is really difficult to find, and even when the data exist, they are so spread out federally and provincially that experts, themselves, have a hard time finding them.

In Canada, improvements could be made as far as coordination and co-operation are concerned. A pan-Canadian model is another possible approach.

[*English*]

Mr. Marc Serré: RS Energy Group also indicated a national energy centre. As I indicated earlier, politically it might be difficult because there are millions of dollars to be spent to have the buy-in of all the local parties to do this. If we're not going to do a national energy centre what can we do to enhance NRCan, Statistics Canada, and provincial relationships to get better data today because obviously right now Canadians are evenly split on both sides of the debate. There's an issue; both sides say there's no credible data.

What can we do to enhance the institutions that we currently have without spending millions to establish an EIA-type U.S. system here in Canada?

Ms. Judith Dwarkin: I will follow on what Professor Gattinger was saying. There are reams of data available now, but they're a completely mixed bag across the provinces and at the federal level. In the first instance, the National Energy Board has already taken steps towards establishing a portal, an online portal, where people can go to access primary data on a variety of energy-related things. However, it's incomplete, and it is not particularly user-friendly because the user gets directed to third party websites and then has to grapple with the various issues pertaining to that particular entity's data, such as the use of different definitions.

I think that in the first instance the committee should accept that additional resources are needed to take it from the step that has been established already at the National Energy Board—which is a pan-Canadian entity, in my view—to supplement their resources so that they can carry on the good work that they've already started.

At the end of the day, we might not have a bright and shiny thing that's quite as glamorous as the EIA's framework, which, as I say, they've been doing for a long time and with vastly more resources. I think that if additional resources could be provided to an entity like the National Energy Board, which can also.... Some of their links currently go to the CANSIM database, but from my perspective, that database entails a really terrible hunting and pecking operation, which I think is not at all a good use of anybody's time.

It's not that there aren't data there. It's that they need to be curated, collected, and then disseminated in a very consistent way so that anybody who wants to use the data can use the data.

● (0915)

[*Translation*]

Mr. Marc Serré: You can go ahead, Mr. Nieboer. I have 30 seconds left.

[*English*]

Mr. Ian Nieboer: Very quickly, I have two things.

I think that agencies within our own government organizations are grappling with the same issues that we as practitioners are facing. There is a drag on resources that exists today because of the inefficiencies in that system.

Secondly, like any other natural resource, if we aren't collecting this, if we aren't aggregating it, we are missing out on an opportunity that any other resource-rich country is trying to capture.

[*Translation*]

Mr. Marc Serré: Thank you.

Ms. Gattinger, you said it was important to engage indigenous groups in the process. I'm out of time, but if you have any information or recommendations on that specifically, could you kindly share it with the committee?

Prof. Monica Gattinger: Now?

Mr. Marc Serré: No, afterwards.

[*English*]

The Chair: We're going to have to do that in writing because we're going to have to move on.

Mr. Schmale.

Mr. Jamie Schmale (Haliburton—Kawartha Lakes—Brock, CPC): Thank you very much, Mr. Chair.

Thank you, witnesses, for being here today. It's been a great conversation. I think we do agree that there is a lot of data out there. How we collect and then translate that information is something that we are trying to figure out.

We just spoke about different options and different recommendations, picking up on what Marc was talking about, on how we can utilize current assets and current agencies rather than creating an entire new agency to do this. We know that taxpayers are being asked to evermore contribute more to government, and we don't need to continue to grow this government, so that's where I am looking at this on how to go. Stats Canada has a mandate to collect this information and publish it on all sorts of sectors.

How about a different idea, and I open the floor to this. What if we created a user-pay system where those users who want the information can pay into it? We can have that central system that you mentioned, but it is paid for not by taxpayers, but by the people who actually want and need the information.

Prof. Monica Gattinger: That's a very interesting perspective.

Certainly, that would be something worth exploring, but I would raise a few cautions with respect to that. To the extent that we're looking at increasingly new users who would be then required to pay, if those users are indigenous communities, local municipalities, or individual Canadians, that raises some very fundamental considerations, I think, around equity and accessibility. The research that we've been undertaking at Positive Energy really underscores that information is necessary. It is a necessary but insufficient condition when it comes to strengthening public confidence in energy decision-making. It really is a fundamental need in our decision-making systems.

I can well appreciate that there are some concerns around further expenditures of government resources. That said, I would invite the committee to consider the costs of not investing in additional resources when it comes to energy information. In this country, we have, as we well know, increasing levels of polarization around energy issues. In many instances, they are driven by misinformation, biased information, or lack of credible information. I would invite the committee to think about what the lack of a credible information system is actually costing the country, to perhaps think about the amount of resources that would be required to strengthen that system with whatever model is being utilized to advance with, and to look at that as an investment as opposed to an expenditure.

Mr. Jamie Schmale: Stats Canada makes information right now, as you pointed out. It's general. It's free. It's out there. If businesses are using this information to make decisions, I would also argue should they not be required to pay something into it, other than through their normal taxes?

Prof. Monica Gattinger: I suppose, again, that could be worth exploring. I think it probably merits mentioning as well that for some StatsCan data there already are user-pay arrangements. Certainly industry is already paying indirectly by the provision of much of the information that Stats Canada is utilizing, so again, any additional requirements that businesses need to put into play in an additional reinforcing of that system, should be taken into consideration when it comes to what the costs are for businesses as well. I think it should be done with consideration for equity and access and the costs of doing business.

● (0920)

Mr. Jamie Schmale: I think it was mentioned already just a little while ago. I can't remember who said it, so I apologize. They said a database within the NEB has that information. If I misheard please correct me.

Ms. Judith Dwarkin: I made that claim.

The Chair: Mr. Schmale, I don't want to interrupt you, but I think that witness would have had an answer to the previous question.

Mr. Jamie Schmale: Okay. Can I have that answer to that question, and then I'll go back to the previous question, just because we're on a roll here?

Ms. Judith Dwarkin: The National Energy Board has set up a portal where you can get linked to various websites, including CANSIM, industry organizations, and some provincial agencies, and go and dig around for data. It is still pretty cumbersome, and the data, as I say, are quite disparate. Different data providers use different definitions for the same thing. Some of the data are very granular. A lot of the data available from the Canadian data system, CANSIM, especially on the consumption side of things, are very lagged. They're very dated, and therefore, of less use when it comes to analysis, unless you're doing long-time series sorts of things.

Granted, Stats Canada has a mandate to provide data, and they do provide data, but from our perspective the data have inadequate coverage. There are lags and inconsistencies for some provinces. The consumption data for natural gas, for example, just make no sense at all when you look at it over a long period of time. You see weird swings in sectoral demands that are just not explainable by weather or anything else.

Your provocative notion of user pay for national statistics is an interesting idea. I would simply point out that, from an economist's perspective, if information isn't distributed equally on all sides of the debate, that's one of the ingredients for market failure. Where there's a disproportionate power because the distribution of information isn't equal, not everybody has access to it, which goes to Professor Gattinger's point that not everybody can afford the information.

As well, basic, good, accurate, reliable, and timely information about the energy ecology of Canada is a public good. Governments ought to be doing it because third party providers aren't. They will provide snippets and bits and pieces, and they do that now, but in our experience data purchasing from a third party tends to be very expensive because some of the data are pretty hard to collect.

Mr. Jamie Schmale: How many of the small players, if you will, are accessing these data? Many of the companies we're dealing with are larger and can afford to be into this. Could you give an example of a smaller company that might not be able to pitch in some money to keep this going?

I'll get back to the other question after.

The Chair: No, you're going to have to answer this question very quickly, and then we're out of time.

Mr. Jamie Schmale: I guess I won't.

Ms. Judith Dwarkin: For example our company is pretty small. There are certain data points we'd like to be able to access, but we decided the price tag from the third party provider is too high.

Mr. Ian Nieboer: More importantly, you can't access it at perhaps some of these numbers, and at that point you restrict the innovation potential that young people, institutions, maybe not-for-profit institutions, could build an industry on. If it's just about information and collecting what we have, I think your notion may have some merit. If it's about trying to create a national resource that we can build on for our economy going forward, where the focus is on skilled, highly technical, intellectual capital, you need a resource to build on. You're restricting that or putting it in the hands of the private sector if you take this kind of move.

The Chair: Thank you.

Go ahead, Mr. Cannings.

Mr. Richard Cannings (South Okanagan—West Kootenay, NDP): Thank you all for being here this morning, especially those in Alberta. I'm from British Columbia, so I know what it's like to have morning teleconferences with people in Ontario.

I want to start with Ms. Dwarkin.

If I caught you right, you said that one of your main recommendations was to provide the NEB with sufficient resources to be this portal, or this gatherer of energy data, that we're talking about. However, we hear from many witnesses, including Professor Gattinger, that trustworthiness is really at the core of this credible data. I've heard from a lot of people who wouldn't trust the NEB as far as they could throw it. By some groups, it's seen as a real cheerleader for industry. I wonder if that would be a real impediment to creating this thing.

If we're all about creating trust and credibility, is this a non-starter? Perhaps you could comment on that.

● (0925)

Ms. Judith Dwarkin: Thank you for that question.

I'll put my personal view up front. I'm not in the camp that can't throw the NEB far.

Mr. Richard Cannings: I imagine there are many that are in that camp.

Ms. Judith Dwarkin: I do think that it's a very respectable entity that's done a lot of good work over the years. Perhaps the way to address that concern about perception of biases is that the way the NEB could go about building on the data that it already has amassed or is provided access to and perhaps set up a working group that includes some of the credulous parties, who don't think the NEB is unbiased, so that it's more of a joint effort from the different corners of the debate to identify the data that is useful and to continue that process.

As I've heard already this morning, setting up a whole new entity may not be in the cards because of expense reasons. The NEB already has mounds of data. They have already taken the first step towards something that could look like a national energy database. Maybe the next step involves conscripting folks to the cause that might not be in support of the cause unless they're inside the tent helping to forward the effort, as opposed to outside and shooting arrows into the tent.

Mr. Richard Cannings: I'll turn to Ms. Gattinger.

Maybe you could follow up on that. Also, in regard to trust and credibility, you talked about the importance of having an agency that would do analysis, and modelling, and provide information to Canadians, as well as just raw data. I think that's where some of the concerns for people come in because, as anyone knows, you can massage statistics into a lot of different forms. I wondered if you could comment on that.

How important is it to have an agency that is independent, in terms of funding and in terms of direction, especially if it's an agency that is going to be doing analysis and modelling, and showing Canadians what the future may hold or what the past was all about? It's a big broad question, but maybe...with regard to whether we can use an agency we already have like the NEB or Statistics Canada, or whether a new agency would be worth that price tag.

Prof. Monica Gattinger: I think I would really draw on the work we've done over the last three years at Positive Energy. We've undertaken extensive research and engagement around how to strengthen public confidence in energy decision-making. This is an issue in this country that has been extremely challenging over the last number of years.

I would really point to something that's emerged time and again in our work, which is that public confidence in the substance of decisions—or in this case of information—is very fundamentally linked to the process by which it is developed. When it comes to thinking about organizational arrangements, I can well appreciate the desire to work with what we already have, but I think we need to look very closely at what some of the negatives or disadvantages would be of working with some of the organizations that we have.

For example, take a regulatory agency, whether it's the NEB or another regulatory agency at the federal or provincial level. These are organizations that, from the public's perspective, are predominantly about either approving or rejecting projects. If those organizations are also then responsible for creating energy information, does that then at some level put them into some sort of a conflict of interest?

If we want to have an agency that can do things proactively, for example, put out information around pipeline safety or put out information around tanker safety, if you're also the organization that is responsible for evaluating a proposed project that deals with those issues, will that be perceived as credible and independent by the public? Those are the sorts of things, I think, that I would hope the committee would look at very carefully.

I think the same thing would go, for example, with having an energy department as the node or focus for these efforts to the extent that an energy department has, as part of its mandate, the development of a particular industry sector. Again, from the perspective of the public, this could be also looked at as in some way tainting the capacity for that organization to be providing neutral, non-partisan, independent, balanced energy information.

What I would just end on here is, again, I recognize from a resource perspective the challenge of additional expenditures, but I would also invite the committee to think very seriously about what the costs are of not putting in place a system that is viewed as credible and independent by all parties when it comes to energy.

● (0930)

Mr. Richard Cannings: With regard to that and Mr. Schmale's suggestion about a user-pay system, beyond excluding some groups that may not be able to afford that information, would you say that a user-pay system might favour those who can pay and, therefore, kind of direct the agency's analyses and modelling if they're being paid by the groups that can afford it, some of the bigger industry companies, for instance? Would that not taint the credibility and trust that the Canadian public would have in it?

Prof. Monica Gattinger: That would be difficult to say *ex ante*, and I think it would really come down to how it's structured from an organizational perspective. That said, as we well know—and we've seen this increasingly over the last years when it comes to the energy sector—reality and perception can be two very different things, and at the end of the day, perception can become reality.

So even if, in the organizational arrangements, those sorts of concerns are dealt with, if the perception is that it's not the case, that can become really the overriding concern.

The Chair: We're going to stop there.

Mr. Richard Cannings: Thank you.

The Chair: Mr. Whalen.

Mr. Nick Whalen (St. John's East, Lib.): For those who have been with me on the committee on this topic, everyone knows that I like the idea of this piece of infrastructure. It is important industrial infrastructure and I think it pays for itself, so I buy into that line of reasoning. When we had the folks here from Nalcor Energy in Newfoundland, they demonstrated how making their data publicly available has really driven growth and foreign investment in the industry. We'd like to see that across spheres.

I want to drill down a little more on the level and type of independence that we are looking for. When I come to this committee, I wear my politics on my sleeve. When Mr. Genuis comes, he wears his. When academics or bureaucrats who are involved in running the organization come, they're not necessarily up front about their politics, but that's not to say they don't have them.

Ms. Gattinger, when you talked about NEB either approving or rejecting projects, in my mind that was already predetermining an issue and stating a political bias. NEB either rejects projects, or they say how, and they put hundreds of conditions on some projects. In Newfoundland and Labrador's case, it's the C-NLOPB. It's not a question of yes or no; it's a question of no or how. We want to make sure there is a path to "how", because if there is no path to "how", there is no industrial benefit ultimately from this.

I want quick perspectives from each of the three of you on the level of independence you are looking for, and the model of independence. Does it have to be independent of customers? Does it have to be independent of government entirely? Is it an agency of government that reports to Parliament? What level of independence are you looking for?

Maybe we'll start with the people from Calgary this time.

● (0935)

Ms. Judith Dwarkin: Thank you.

From my perspective, data are ideologically neutral. Basic data on production, consumption, prices, imports, and exports don't have a particular ideological slant. Therefore, an entity that is simply collecting those primary data, which we do need, notwithstanding what's in the CANSIM database, is already independent. It's just collecting basic, primary data.

That's kind of where I sit on that topic.

Mr. Ian Nieboer: I would extend it. I think the notion is that it's independent, but I can understand why some might view the sources and compiler of that data as perhaps influencing in some way.

As a consumer, it's helpful to understand and have consistency of source. At the very least, if you believe in or if you imply some bias, even if it's not there, you're in a position to at least account for that, rather than a distributed network of sources with all their own idiosyncrasies and biases, which are real or perceived, being incumbent in that.

Prof. Monica Gattinger: Very briefly, I would add to that. Fundamentally, it's about credibility, and credibility then can be based upon ensuring that you have the engagement of all of the key "stakeholders" or rights holders, or those with an interest in the sector. It's not necessarily independent, in the sense of not bringing to the table particular perspectives and points of view, but credible in the sense of being viewed as balanced.

Mr. Nick Whalen: My next question is whether we can build half a car. In the U.S., it's all paid for by Congress. They're throwing about $125 million a year into the EIA. It's a world-class institution. Do we have to go that far?

This is certainly a question for RS Energy Group, because you provide these types of data services. We had a previous witness say that maybe, in order of magnitude, somewhere between one-tenth and 10 times the amount.... It's not a great ballpark for policy-makers to determine, but how much do we need to be spending extra on data to get this project rolling and to sustain it long term?

Ms. Judith Dwarkin: I think the answer to that requires some research with what's available and what is needed to get it into minimal shape, along the lineaments of what EIA provides in the basic data categories: production by energy type, consumption by energy type, storage—that's a big one that national data are very severely lacking.

To get from where we are.... As I say, I keep harking back to the NEB's portal, but it's one step toward this one-stop shop. What resources would be required to get that into...? What data are out there already? You don't have to make up new data or collect new data, but take the data that are there and put them in a consistent format. Get it on a publication schedule that's regular and known and timely. Scope out the cost of that kind of a project, and then it will be a case of having to increment along until we have the Canadian version of it.

There are things that the EIA does that we won't want to do in the end, perhaps. It does a lot of forecasting and has huge clanking models that do that. We probably don't need to go into that, but on the basic data service itself, we're only one step towards that. I'd say do some scoping on the business case to do the next step.

Mr. Nick Whalen: Ms. Gattinger.

Prof. Monica Gattinger: I would just add, to come back to the idea or thinking about this as an investment as opposed to an expenditure, that I would encourage the committee to look at the potential economic contribution.

Mr. Nick Whalen: Let's go straight to there.

We've heard testimony that five-sixths of every dollar spent by organizations such as yours is spent on finding the data rather than analyzing it within your own organizations. If we had this type of energy resource, you'd probably analyze American data and compare it to Canadian, so you might have a sense of how much extra work it is.

How much would this drive your productivity within your organizations, to have a comparable tool in Canada to what the Americans get to have?

Prof. Monica Gattinger: The work that we do at Positive Energy is much more about looking at the decision-making arrangements and how to strengthen public confidence in decision-making arrangements. We would look at it through the lens of "what about the existing and the new users of energy information, notably municipalities, individual Canadians, whether as consumers or as citizens, indigenous communities, and the like?"

We're certainly seeing, with the research and engagement that we've undertaken over the last number of years, that the lack of credible shared views around information is really hamstringing the country. It's one of the reasons—not the only reason but one of the reasons—that's hamstringing the country when it comes to exactly the point you were mentioning: getting to "how" on the development of natural resources.

● (0940)

Mr. Nick Whalen: Sure.

Ian, would it drive productivity in your group?

Mr. Ian Nieboer: Absolutely.

When we look internally, we've spent probably half of our time trying to collect, correct, curate, glue together different datasets from hundreds or even thousands of data sources. There's massive drag there, and that has two effects: first, it's a loss in productivity; and second, it is a lost opportunity to look at what you find when you put it all together.

In many cases, we don't attack or other firms don't attack the Canadian data with the same vigour and the same opportunity, because it's so much more difficult to....

Mr. Nick Whalen: This probably goes to something you said earlier.

I'm not sure if I'm getting the quote right, but it was basic infrastructure that will smooth the flow of everything, from commerce to discourse.

Mr. Ian Nieboer: It's a raw resource.

Mr. Nick Whalen: Do you think we would have better capital flows for financing our energy-related projects if we have this data, or do the people who are actually making these large investment decisions have access to the data because they can buy it and they'll hire the engineers to do the work for them anyway?

Mr. Ian Nieboer: We are that entity, and we don't consume Canadian data as fulsomely as we probably could, given its current structure and state.

Ms. Judith Dwarkin: To add to that, the other side of it is that more accessible, transparent data might help expedite certain activities going forward, because there's a greater acceptance of those data across the different opinions on different issues in the energy sector.

Mr. Nick Whalen: Okay, so earlier Ms. Gattinger had mentioned —

The Chair: We're going to have to stop it there.

Mr. Nick Whalen: —users, and I think maybe investors would be in that category as well.

The Chair: Mr. Whalen, we're going to have to stop there.

Mr. Nick Whalen: Everyone else went long.

The Chair: Not as long as you.

Thank you. We're going to have to stop there.

Thank you all for joining us today, especially for getting up so early in Calgary. We appreciate your time.

We'll suspend for two minutes, and then we'll start with the next witness.

● (0940)

(Pause)

● (0945)

The Chair: I apologize for interrupting. We do have some business to deal with.

We have a PowerPoint presentation from the next witness, but it has just been received, so it hasn't been translated.

Is there any objection to circulating it, knowing it will be translated later?

Okay, we can distribute it.

Good morning. Thanks for joining us from Calgary. We know it's a bit early there, so we're very grateful for your taking the time in the early part of your day to join us.

The process for the morning is that you collectively will have up to 10 minutes to make a presentation, and then we'll open the floor to questions from around the table. You can deliver your remarks in French or English, knowing you'll be asked questions in both languages. You should have translation devices available to you should you need them.

The floor is yours.

Mr. Steve Lappin (President and Chief Operations Officer, Intercontinental Exchange - ICE NGX): Okay, very good. My name is Steve Lappin, president of ICE NGX.

I'll give you a very brief and quick background on our role in the energy markets. Then Greg Abbott, head of operations, will talk a bit more specifically to the data: indices and some of our settlements information.

ICE NGX is a leading physical energy exchange based out of Calgary. We've been around for about 25 years. Unlike most quantity exchanges, we actually get involved in the physical products, so when you trade commodities with us, physical energy, natural gas, and electricity actually move and whatnot. I've been at that for a while.

We were recently purchased by ICE. They purchased us last year. It started with backing by the pipelines in 1993 with Westcoast Energy, which is now Spectra. In 2001, it was OMX, which is part of the Nasdaq group. In 2004, the Toronto Stock Exchange Group owned us. In 2012, of course, they became the Maple Group. Then, as I said, in December of 2017, we became part of the ICE group.

We have dominant market share in Canadian physical spot gas. Greg will talk about our physical natural gas markets. That and our power indices are the Canadian benchmarks in terms of pricing. We handle Canadian crude oil as well, and we have some pricing and data on that front.

We also have U.S. operations set throughout the majority of our business. The dominant portion is on the Canadian side, but we do have markets throughout North America.

All of our markets are traded on the ICE front-end trading platform, and everything is electronically traded. We do get some, what we call, over-the-counter clients as well, which is where bilateral counterparties have entered into an agreement and then bring it to us for clearing.

We have both the exchange and the clearing house side of the business. The clearing side is your typical clearing house. It takes in all of the transactions. We provide both a physical and financial assurance and guarantee to assure performance.

We typically hold about $2 billion or $3 billion in collateral to secure those positions, those transactions, that take place. It's a non-mutualized model, which means that the counterparties trade directly with us. They don't go through a broker-dealer or any sort of intermediary.

With regard to some key assorted facts, we have about 275 counterparties annually clearing about $35 billion in terms of transactions that are done. We settle up about $500 million to $1 billion monthly. The total daily volume is about 45 billion cubic feet. The total Canadian production is around 16 billion cubic feet. Obviously what we transact is a multiple of the entire underlying Canadian natural gas volume as well. We have over 90 different clearing hubs and locations, as I said, throughout North America.

From a regulatory perspective, a highly regulated entity, the Alberta Securities Commission is our primary regulator here. It oversees us both in terms of an exchange and a clearing house. In the U.S., we're overseen by the Commodity Futures Trading Commission, as a derivatives clearing organization, as well as a foreign board of trade as an exchange. We also have EU recognition as a third country central counterparty.

In terms of a brief background regarding our markets, the majority of what we do is out of what we call "AECO AB-NIT", which is here in Alberta. As I'm sure you understand, that is the predominant production of natural gas supply in Canada, so that is where our single largest market is. The next largest would be out of Dawn, Ontario, where a lot of the gas moves for consumption both within Ontario and then further on into the U.S. Those are our two major markets.

On the electricity side, we have both Alberta power and Ontario power. Crude oil is mostly done through our brokerage affiliate entity. We provide the indices and numbers for that. That is on the Canadian crude oil products throughout Canada, but again, predominantly in western Canada for all the major grades of crude oil.

In the U.S., as I said, our natural gas markets are throughout the U. S. We also run the Texas physical electricity markets there as well.

● (0950)

I think that's really it. We have a wide variety of contracting parties we deal with. We do have our bank hedge funds, marketers. We have a number of producers, midstream physical pipeline, utility, storage companies, and what not. In addition, and this is a sort of segue into the data part, we have over 70 view-only customers. As you can imagine, we collect a lot of data and information from all these transactions. Certainly our trading entities use it, but as well we have additional business with those who don't transact but simply subscribe to and use our data for other purposes.

With that, I'll turn it over to Greg Abbott. I'll let Greg walk you through a bit more on what we do on the data side.

Mr. Greg Abbott (Vice-President, Market Operations, Intercontinental Exchange - ICE NGX): Good morning, everybody.

I just wanted to speak really briefly about the data products offered by NGX. All of our data products really are derived from transactional data. I think it's important to understand that we really are an exchange and clearing house, so our data products are all transactional based. For these discussions and the exploration to national data products, there are a couple of different types. There's the people looking to aggregate physical data, receive delivery data, storage information, and that type of thing. What NGX has really is the transactional piece.

As Steve mentioned, we have a very dominant market share. NGX calculates a couple of different key datasets or data products. We classify those as trading price indices or price indices, and then settlement curves. A price index is effectively just the weighted average of all the transactions in the applicable product. We calculate traded price, real-time price indices for natural gas, crude oil, and electricity, all just in Canada. While Steve did mention we clear about 60 or 70 locations in the United States as well, NGX has not published data products for those. We only publish Canadian data.

We also publish a lot of crude oil indices—again, Canadian only. These are transactions that are done on our brokerage arm, our sister company. Those transactions are then routed electronically to NGX, and we have an engine that we've developed internally to calculate the price indices as well. We do the same thing for electricity. We have electricity products here in Alberta and electricity products in Ontario as well that we clear.

Whenever we refer to a price index, it really is the weighted average of all the transactions done in the applicable instruments for that index.

A price settlement curve, which is also a very valuable piece of data to our client base, is really the projected pricing for any type of product or location of a product for that day. At the end of every day, NGX publishes approximately the forward 60 days and the 60 months. That's about two months of daily products and about five years of monthly products of pricing curves for every product that we clear. For every gas, electricity, and crude oil product across North America that we clear, we'll publish those price settlement curves once a day at the end of each day.

There are a couple of other ancillary products that we have. We do publish something called the Alberta market price as well, or the AMP. The Alberta market price is a product that we publish in tandem with the Department of Energy here in Alberta, so it really is a weighted average price of all gas that actually delivers. Regardless of trading time, it's all the gas that's delivered in a calendar month. That average is then used as part of the calculation for royalty payments by the Government of Alberta here too.

Each of those services that we mentioned has a different type of commercial structure. Many of them are proprietary and subscription-based so people have to subscribe in order to access those, but we do have some free data as well available on the NGX.com website. For example, for those settlement curves we talked about, we keep a rolling five-day list of them available for free on the NGX.com website. If a client wants to access our full history, and we have history going back in both price indices and settlement curves for about 20-some years. If you want to access that, that's a subscription cost. You have to pay for that, but if you're looking just to keep up to date on what the settlement prices are and what the curves are each day from a gas price perspective, you can access that for free on our website.

The AMP price we talked about that gets used in the calculation of the royalty price can also be accessed for free on the website. You can go there and check that out as well.

I think that's the crux of it. We just wanted to highlight the fact that we do offer data. It's transactional based. It's really across Canada. It's Canadian focused, and it is multi-commodity: electricity, crude oil, and natural gas.

● (0955)

The Chair: Thank you very much.

Mr. Whalen, you're first up for seven minutes.

Mr. Nick Whalen: Thank you very much.

I'm interested in how your organization interfaces with the EIA. I'm trying to figure it out online. I'm not sure if you provide the natural gas trading resource margins online, or other real-time data that's provided by your organization, to the EIA. Can you juxtapose that with how your organization provides the natural gas and crude oil data and energy data you collect to StatsCan or the Alberta government?

Greg is the data guy. He probably has the quickest answer.

● (1000)

Mr. Greg Abbott: Sure. We don't directly provide data to the EIA and we don't have a direct relationship with them. I think they do access our website, as I mentioned, so they will get our settlement curves and that type of stuff from the website. We don't have a direct connection with them. We use some of their data, so we take a look at the storage information they publish and use that data sometimes as well. There's no direct connectivity such that we're sending stuff to them on a regular basis, but they do access our website regularly.

The only one of that group you mentioned that really has a direct relationship with us is the Alberta government. The Department of Energy does have access to NGX. They subscribe to NGX so that they can get access to all of our proprietary settlement price data and index price data.

The other group that does, the National Energy Board, is also a subscriber of NGX data. They do access us that way and get access to all of those curves and prices as well.

For everyone else, really we just make sure we're publishing our information on the website. I do think those entities are accessing it, but since it's on the website, it's not direct and we're not talking with them. If there is an issue with it, they can call us and we'll make sure the numbers are right, but other than that, there's no direct connectivity except for those entities I mentioned.

Mr. Nick Whalen: When the EIA gets the natural gas data, are they juxtaposing your posted figures with energy data provided directly by buyers and sellers? Do you have an understanding of how that works? They do have their own natural gas data, and lots of it daily. I'm trying to figure out whether they're relying on you for this data or they're using you as a basis of comparison against the actual data from the producers.

Mr. Greg Abbott: I would guess it's the latter, that are using us as a basis for comparison. As I said, they can access it and take a look at it, but from a republishing perspective, we have some pretty strict language around our contract because it's proprietary. They aren't allowed to take exactly what they see in the subscription's pay area and republish it to their clients, but they can use it to compare and do whatever they need to. That's the way we've operated with any of the government entities we've dealt with, and it's the same with the government. We understand they're using it for purposes important for their business, so they're allowed to do that. We just ask that they don't republish it directly.

Mr. Nick Whalen: Do you have any opinion on whether the availability of energy data in the U.S. makes their market more or less competitive than Canada's? Do the entities that need the data have the data they need, the people who are trading at the levels that you're talking about?

Mr. Greg Abbott: That's a good question.

Mr. Steve Lappin: My sense would be the latter. Those who need that data and trade around it have a ton of detail. They're either subscribing or getting it naturally through their trading activity. That's just based on our view in the markets we deal with. They have access to all of that data, so I would be highly surprised if any of those involved in the marketing or trading were having to go to the government website to access that information. They'd have their own sources.

Mr. Greg Abbott: I also think there's a really competitive business in the aggregation part of the data world, so there's a ton of desktop providers and they really are trying to build that perfectly aggregated collection of data. There are a lot of people in our business for sure, both in Canada and the United States, and almost every single one of them has some sort of subscription to an aggregator. I do think they would access EIA or AGA types of information, but I also think they're using an aggregator to collect price indices, storage information, and everything into one desktop.

Mr. Nick Whalen: How has the EIA affected the U.S. market for aggregators? Has it reduced it, helped it? Do they have a more competitive marketplace for that in the U.S. or a less competitive one compared with Canada?

Mr. Steve Lappin: That's probably tough for us to comment on.

Mr. Nick Whalen: That's fine. I have another question to move to, because I have very little time.

End-user data is something people have spoken to us about as being something desirable by their particular group, but the manner in which end-user data is collected has really varied. The U.S. does a survey, and I'm not sure if any of your clients on the buy side have expressed any desire for data products that you aren't able to provide because you can't get the data, even though it would be nice if the government provided end-use data in Canada for energy users.

Should that be aggregated across all vendors so that everyone has a clearer sense of the end-use natural gas market, the end-use electrical market, or without a smart grid, the self-generated energy market? From your side, is demand coming up for any of those things?

Mr. Steve Lappin: We really don't.... We do publish—one of them is the Alberta power market—so we host auctions for that, so that provides the regulated rate option. So if you're in Alberta and you're dealing with that generator provider, that provides the end-user with a variable price that comes with it. We've seen that through markets. Certainly our natural gas pricing represents.... I guess it wouldn't be the retail, more the wholesale—

Are you talking both about the retail and commercial actual end-user? It's a bit of grey area.

● (1005)

Mr. Nick Whalen: No, I think at the commercial level it's known, but it's more how the adoption of clean energy may affect or disrupt other aspects of the energy market. It's unclear when people transition to clean energy what the reduced demand will be on the natural gas market or the electrical grid, and how people can forecast that so they can invest.

Mr. Steve Lappin: Yes, so again, at the wholesale level, I think that's well covered and quite available, and I think you can get at it, but in fairness, as Greg said, you have to kind of piece it together, in terms of its being centralized and brought together. I think you could go to the various exchanges, clearing houses, other aggregators, brokers. There are just a lot of third party entities that have this information, so you'd have to cobble that together, I think.

In terms of actual end-user information, yes, other than these regulated rates stuff, I'm not sure there's the same level of transparency on that front.

The Chair: Thanks, Mr. Whalen. That was almost right on time. That was great.

Mr. Schmale, you have as much time as you want.

Mr. Jamie Schmale: "Almost right on time"...? I thought Nick was going into Mr. Canning's time.

Thank you, gentlemen, for being here. I appreciate your coming and sharing your opinions. Building on what Nick was talking about, if Stats Canada or an EIA-type agency started to not only publish the data, which they have now, but do analysis on that data, how would that affect your operation or that of businesses like yours?

Mr. Steve Lappin: I'll take a shot at that, and let Greg finish.

Obviously that's something we monetize and sell, in terms of providing that information. I suppose to the extent it almost became competitive with that, then perhaps that wouldn't be a positive thing. I think, though, there's probably a difference. With exchanges and clearing houses like ours, which use actual transactional data that is electronically captured, and you're talking thousands of transactions per day, rather than surveys and that sort of thing, I think it's just a different type of information.

If that were assimilated by Stats Canada or anybody else, I'm not sure that would be competitive. I think there are other publishers out there who do use surveys and gather data through informal sources, etc., and they may be more impacted by it.

I think the overall transparency is good for all businesses—the more known they are, the more they're out there, the more available they are. It would probably be a fine line at what point it starts to compete with businesses that, as I say, charge folks for that data.

Mr. Greg Abbott: I think also what's really important is that, while I'm the data guy and it's kind of weird to say this, we do have a core business that really is trading in clearing commodities as well, so I think providing more tools for our clients to be informed and to make more informed decisions around transactions is actually a good thing for our business. From that perspective, it may be competitive with our data business, which obviously we'd want to be aware of, but at the same time, providing that information to clients and allowing them to make better decisions around transactions is important.

NGX is a physical clearing house, a physical marketplace, which makes us sort of unique in the world and unique in North America. Having that kind of depth of information around what's happening in the actual marketplace is important. It's not just other markets where you really...a financial market where it's just buy low and sell high. You really are taking a look at the actual physical underlying fundamentals of a product before you trade it, and I think having that in one spot could be beneficial to our clients.

Mr. Jamie Schmale: We heard from that last group of witnesses that the data is there but it's kind of all over the place. How do we put it in a place where it can be accessible? Whether or not the analysis done on that information is done by Statistics Canada or a different organization, whether it be individual businesses or...? I threw out the idea of a user-pay system for that information, where it's separate from government.

Judging by what Statistics Canada is doing now, where do you see that they can improve, going forward, that would help you and others?

● (1010)

Mr. Steve Lappin: I don't know, certainly for our purposes—and it's tough to say on behalf of our trading counterparties. You just don't hear much, in terms of use of Statistics Canada information. There may be some. I'm not sure. In fairness, on the other side, EIA is more talked about and referenced in terms of being used in modelling and decision-making in all of those sorts of things.

I think it's about credibility. It's about the amount of resources that are going into ensuring that what's there is good, credible data, and that it's well-sourced, it's fulsome, and it's complete. I do know that in the past, for example, we have tried to use some Statistics Canada stuff, and you weren't sure of the sourcing and how accurate it was. It was a bit spotty, in terms of information. Whereas, EIA in the U.S. is much more comprehensive.

I think that's really it. If there's a more concerted effort to get it right and ensure that it actually does put out very comprehensive information, it would be much more useful to the market.

Mr. Jamie Schmale: Looking ahead at what Statistics Canada or EIA is doing, obviously protecting data is essential to all facets of information. As you see government getting more into the collection of various pieces of data.... Previously in committee, we heard that companies and government organizations are able to track data in real time. You can talk about the Nest system, where they can get information on the temperature of your house, etc., or about the smart meters for hydro where they can get real-time energy consumption.

Do either of you have any thoughts or concerns about the security of that data?

Mr. Steve Lappin: Particularly with our organization and having that data, you can just imagine the provisions that are made for cybersecurity and that sort of thing. It's an incredible amount of resources and efforts to ensure that the data, even at a wholesale level—we're not talking individual retail, that sort of thing—is maintained and put out there.

To the extent that it's handled and treated in the same manner and with that same level of care by the government at a federal level, I don't see any issues with it.

You get into that overall invasion. I guess it depends how far you're talking about going with it. If it's general usage—volume, pricing, that sort of thing—then I think that stuff is fairly innocuous to most and I'm not sure I would view that as highly sensitive. If you get into particular individual habits and that sort of thing, then maybe it becomes a bit more touchy.

The short answer is that I don't see any major concerns with it. It just has to be managed well. It's done around the globe on a very careful basis.

Mr. Jamie Schmale: We saw data hacks with the Pentagon and with the FBI, etc., so we know it can happen. If a single government agency continues to collect more and more information on every single citizen, on a wide range of things, that's where, potentially, I would like to dig deeper, if we do go down that path.

I will wrap up. I'm done.

The Chair: Thank you.

Mr. Cannings.

Mr. Richard Cannings: Thank you for getting up early and appearing before us.

This is a mysterious world for me, the world of energy exchange and all that. I just want to get into these price settlement curves. You mentioned that you do projections over the coming days, and I think you said five years. I assume that this is some type of modelling or some types of projections. I wonder where the data for that comes from, whether you get it externally. I assume that if you're talking five years, it's more than just what was sold yesterday. Through your exchange, it's looking at the world.

Could you maybe expand on that? I'm assuming that a better data centre in Canada might be very informative for those models. Could you comment on that and what you would like to see in a new system?

● (1015)

Mr. Greg Abbott: Sure.

With the price settlement process, effectively a couple of different pieces happen. NGX has built our own relationship engine or settlement engine. Effectively it's really just the way to price gas, or any commodity, across multiple different locations.

First, we have relationships between the different locations. For example, we'd look at gas trading in Alberta and figure out what the difference would be for gas to get shipped out to Ontario, or Dawn for delivery. We may use that as a base market, and then for a lag market we'd say, "Okay, we know the differential is $1, so if gas is $2 in Alberta, it's $3 at Dawn." You build all these relationships across the market.

The liquidity on NGX, though, on our exchange, is quite high. As you mentioned, a lot of our forward curves do have actual transactions or bid offer spreads that go fairly far out the curve as well. We can use that to extrapolate our settlements. For example, you may not see a transaction on a day, but because our market is live, you may see a bid and an offer spread that's a few years out the curve.

If in Alberta somebody said, for 2022, they were willing to buy for $3 and somebody was willing to sell for $3.25, we're able to pick the midpoint there and help settle our curve and smooth that curve out.

First, we'll use all the transactions and all the postings on the NGX screen, and then, as you said, we go external. We will talk to market participants who were doing transactions off screen if there were bilateral transactions happening that day. We have a group of staff members each afternoon who are talking to everyone in the market, traders in the market, and figuring out what the pricing was for that day, really just modelling out that forward curve and then using that relationship table that I referenced to settle products that were less posted.

Something might be a little less liquid, so we'll take all the liquidity that was in the Alberta market, for example, which is a very liquid market, figure out what the differential is between Alberta and another market nearby, or close by, and apply that differential to it to settle the other one.

We do look at other different data sources. To your original question as to whether it could help, it could. Having a new centralized location for data could help, but again, there's some real-time functionality to this as well. It's being done every single day. Those numbers are really important. Not only do they mark the end of the market and the start of the next day's market, but NGX also runs a clearing house so that everybody who has positions gets marked against those settlement price curves at the end of the day, too. If you have a position, we'll settle that, and then that number gets actually applied to the margin we hold for those clients.

It all ties together. It's a bit of a science and a bit of an art to do the settlement curves at the end of each day, but we are definitely accessing more sources than just what's on our screen. To do our settlement curves each day, there are a lot of third party data sources, other clients, traders, and brokers in the market who we talk to.

Mr. Richard Cannings: Just to be clear, you may be using these other settlements, bids, and offers that go into the future, but obviously there are people outside your company who are using some data to make those future bids and they might be interested in a new energy information agency, or whatever, that could give them more data.

Is there data, then, that is not available or not readily available in Canada? I think there was a comment about Statistics Canada data being spotty and not as useful as the EIA's. Are there any specific recommendations you might have for what would make those future projections more useful and more accurate?

● (1020)

Mr. Greg Abbott: Not really. I guess I would come back to.... For us—and again, we're a little bit on a different footing than some of our clients—it comes down to the aggregation of that data. Most of the datasets that clients would need to develop the forward curve are out there somewhere, but it's multiple different sources you're going to have to go to to find that stuff. I do think that happens, and I think different participants in the market who are calculating forward curves will have different datasets they use. I think it's almost more of an aggregation than an accessibility problem, as opposed to the actual product being there. There's a lot of data out there right now. You really can find transactional data. You can find receipt data. You can find storage information. You can find that stuff, but it's not usually collected in one location.

Mr. Richard Cannings: We'll just finish by going back to Mr. Whalen's question that he abandoned because he wanted to ask something else. That was around that potential competition for aggregators if we had a new energy information agency that was aggregating data, perhaps in real time, or aggregating recent data.

Could you just comment on the possibility of competition with those aggregators and whether that would be a good thing or a bad thing?

Mr. Steve Lappin: Again, I guess it's all in degrees in terms of mix. I suppose you could cross that line at some point where it almost becomes a competitive element with folks like ourselves who do provide that sort of data. I think we've seen a couple things. The EIA has existed for a long time. Our parent company and other large futures exchanges.... I'm not aware of any issues they've had where they felt that in any way infringes on or competes with their current business. I think we have a working model. I'm not aware, again, in our limited view of the U.S. markets, that it's created any sort of issue there.

I think the second one was to your point when you said real time versus historical.... As Greg said, once things become historical, and that can sometimes be almost in minutes and hours—I don't mean days or weeks—it becomes of limited value to the actual wholesale trading market. It's useful to those who use that data and pay for it, etc. I think that's the other key difference, whereas ours, when it's live, real time, and you're actually making trading decisions, then it's very valuable. Commercial entities like ourselves will want to maintain, provide, and charge for that service. However, I think it's almost impossible for the EIA or any central agency to try to maintain and publish that on a real-time basis.

I think they're almost two different products when you look at it. Certainly the latter, what a central agency could do, I think, would be beneficial to the market as a whole, without competing. Some of them do. They'll take historical information. Could they scrape that from a centralized source? You may see marginal impact that way, but I think it would be marginal at best.

The Chair: Thank you. I'm going to have to stop you there.

Mr. Richard Cannings: Thank you.

The Chair: Ms. Ng, it's over to you.

Ms. Mary Ng (Markham—Thornhill, Lib.): Thank you, gentlemen, for coming in to speak to us today. Your testimony is really helpful.

We've certainly heard from a lot of witnesses who have talked to us about the data gaps that exist overall, either in specific jurisdictions or nationally. I think about the purpose of why it is that we're doing this study. We're trying to learn and understand how and what the benefit of a national data strategy could look like because we want to be able to have data that will help inform evidence-based...or data that actually informs good policy-making and good decision-making. That data would exist in multiple places, but it isn't coming together, it isn't being collected, or it isn't being analyzed in a way that also helps not only that good decision-making, but also good decision-making with respect to how this country will meet its climate goals.

At a very macro level, that is what we're trying to understand and that's what we're trying to get some advice on from the many people who have come to talk to us, so that we can learn where those gaps might be, and what the purpose of a single place might be and what they might need to do to gather, analyze, and put out data for decision-making, but also for Canadians, for people to understand and learn what contributes to their carbon footprint and how that data might be relevant to them so that they can make choices. There's that broad spectrum.

I'm interested to learn from you. What you do is about real-time, day-to-day trades and settlement. That data isn't going to be helpful in the purpose that I just talked about, which is really evidence-based decision-making so that consumers can understand patterns and behaviours so that they can change, or so that governments and businesses can make good investment decisions or good policy decisions on the basis of the data.

I know that you touched on our maybe being able to use that information, or the central body maybe being able to use that historical information for the purposes of decision-making, but where could that collaboration be most useful, given the macro of what we're trying to understand here around a national data strategy for energy use, and, therefore, climate reduction goals?

● (1025)

Mr. Steve Lappin: To clarify, when you say "Where could that collaboration be most useful", in other words, do you mean "How could we interact with that agency or whatever to..."?

Ms. Mary Ng: Correct. Your data, how could that be useful?

Mr. Whalen asked if there would be data that would actually help consumers make investment decisions that might be different because they actually have different information that they don't have today. I'm just trying to understand it from your perspective. Can you give us an idea of how your data would be useful in that macro context?

Mr. Steve Lappin: I'll start, and Greg can maybe add.

Certainly what we have, because there are so many pieces to it, is a volume metric, how much. That's going to tell them a lot about supply and demand. Certainly that sort of information we have, and then, of course, there's the pricing around it. Underlying production or underlying generation for power, those sorts of thing we don't have. When I say pricing spread, it's what the difference is in Ontario for the gas or the crude oil, versus in Alberta, versus in Saskatchewan, or anything like that. You can start to get those differences, plus, of course the historical elements. What's the trend and pattern? Where's it going?

It could be akin to anybody who's trying to decide whether to lock in their mortgage rates or whatnot. I think you could go back to see interest rates in terms of movements, trends, what's happening. Because interest rates are a single number across the country, here you could actually see, by region and district, those differences.

That is stuff we have, and I don't see issues in terms of working with a central agency, in terms of providing that rather than their replicating it. You go to a reputable source for that. You provide all of that information, which betters the overall information within the marketplace going forward. That's where I see that collaboration, this joint government-private entity, where they're providing it, and again, not somebody else trying to replicate and do what's already being done in the market for many years.

I just want to be clear about the limitations of the value to consumers. I think there would be value for those sorts of decisions, but anything beyond that....

I'll comment further to the global, that when entities outside of Canada are looking to invest in Canada and make decisions, we get these random phone calls asking if we can you help them out. You know what I mean. It would be wonderful if they had a place to start as they commence their looking at Canada as a place to invest.

● (1030)

Ms. Mary Ng: Okay, that's good.

Mr. Greg Abbott: That's where I was going to go, too. The pricing, it's not.... It's true, complete supply dynamics, supply and demand dynamics, at work here. While we aren't publishing volume numbers or we aren't publishing production numbers, with our real-time markets the pricing is truly reflecting that. If the market gets flooded with supply one day, then the price drops, and then people are extrapolating that this is what's going on. It does allow you to make those types of decisions by looking at just pricing information.

I do think it's closer to what your last point was, Steve, because I do think it 's a real opportunity. This is where we see that. When people are trying to decide whether to generate new production, or if the Alberta government, for example, was kicking off a renewable energy program and trying to get electricity generation that was more environmentally friendly, then people would start using that pricing information to decide what the actual price is right now. They'd make real-time pricing decisions around production generation and that type of thing, and whether to build more or shut in with that type of information. It's important.

The Chair: We're going to have to move on, sorry. We might get back to you.

We go to Mr. Schmale for five minutes.

Mr. Jamie Schmale: Thank you, Chair. I appreciate that.

Gentlemen, thank you again. When we're talking about this data—and I think you have mentioned it before already in this line of questioning, and previous witnesses have done so as well—my first question is on trusting the information. That seems to be paramount in everything, and rightfully so.

What agencies do you think would be best placed to translate this data for consumption? Is it the government? Is it an NGO, private companies? Who would be best suited for that?

Mr. Steve Lappin: That's a bit of a tough one. In our biased opinion, we would say it would be commercial entities, of course.

Mr. Jamie Schmale: Hear, hear!

Mr. Steve Lappin: We spent a lot of money and a lot of experience to get that right. Of course, it's important—again, speaking selfishly—for us entities to remain relevant in the market, and to be the source of that data would be a great thing.

I think, though, to go back to what we said earlier, that the issue is that we, as one example of an entity that could provide that, can only bring together one part of it. I'm not aware of any, but there may be various aggregators who can do that. My answer leads back to that it almost has to be a national centralized place that can actually pull it in, to ensure consistency, to ensure credibility in terms of the integrity of what's brought, with private sources providing that information.

That sounds like a collective effort, but you do need that centralized hub, I think, to be able to pull it all together.

Mr. Jamie Schmale: Just to clarify, you mean the data, not the analysis of that data.

Mr. Steve Lappin: I think I'm referring to both. I know what the EIA puts out for their analysis. I assume it's all done centrally by them. It's excellent. It's well done.

I know individual production companies, BP, for example, do wonderful analysis in annual reports. CAPP, the producers, and so on, do analysis on that basis, but again, you're going to get those individual interests for their group. I think, if it's going to be broadly out there to the public, you need somebody who ensures that it's reflective of the overall market rather than of an individual interest.

So, yes, it's both data and analysis.

Mr. Jamie Schmale: How do you protect for bias in that information—you, the private sector, and otherwise?

Mr. Greg Abbott: From an NGX perspective, almost all of our data, definitely all the price index data is completely what we call "transparent". It's all built off of transactional data done on screen. When I talk about the two data products, the price indices, which are very important, are completely transparent and done on screen, so there is no real opportunity for us to bias those numbers.

For the price settlement curves, as I said, we use multiple sources to develop those curves on a daily basis. Then, those curves are sent out to the marketplace as well, and the marketplace has a half-hour period to reflect or respond to those. From that perspective, really, it kind of eliminates the ability to bias those numbers.

Mr. Jamie Schmale: Okay.

Do you see any further issues if an agency within government provides the analysis of this data? Would you also do your own analysis on it as well, or would you take that as final?

● (1035)

Mr. Steve Lappin: We would, for our purposes, continue to do our own analysis. Sorry, do you mean for our own purposes, or are you speaking in general, when entities are taking a look at that data and analysis?

Mr. Jamie Schmale: I mean more in general, but if you....

Mr. Greg Abbott: Yes.

Mr. Steve Lappin: I think it's always a combination of those items, ultimately depending who it is and what their purpose is. I know that the EIA, for example, is the first starting point where they go for that basic analysis. Then, folks would typically build upon that. We do that as well.

I think that's it. I don't think anybody should fool themselves into thinking they're going to have one place where they can get all the answers. It just can't be there. It may satisfy the general public, down to wholesale participants, but those trying to get a little more sophisticated, in-depth analysis are going to have to use multiple sources, for sure.

Mr. Jamie Schmale: Right. I think in—

The Chair: I'm going to have to stop you there. I'm sorry.

Mr. Tan, you have five minutes.

Mr. Geng Tan (Don Valley North, Lib.): Okay. Actually, I have just one question.

Your company generates and publishes data regularly, and your company also does data analysis, and perhaps provides a prediction about the market over the next few years. I believe other energy companies are doing the same regularly.

We heard from many witnesses about the need to build up a national energy information agency. Suppose that we have such an agency. How will it affect the operation or business of your data section? Does that mean there's less burden on your company because this data analysis, compiling, or prediction function has been taken out from your company and become a burden on the new agency, or does it mean there will be extra burden on your company because the newly created national data energy information system will require you to provide more frequent data so that they can do it in real time?

Mr. Greg Abbott: It probably would depend on what the requirements were. If there were a requirement for real-time data delivery to the new agency, then, yes, it would be a bit more onerous on us to provide that. As Steve mentioned earlier, you're immediately setting up a competitive quandary for us, in the sense that we sell real-time information and real-time data, so we could end up in that type of a situation.

In general, I really believe it would be a benefit to the market, to ourselves, and to our clients to find more information about the industry, but I'm not sure it would change too much what we do here. The need to generate price indices off of transactions that happen on the exchange, the ability to build a price settlement curve five years out for all of our positions so that we can margin our clients correctly, that would still exist. Potentially, we would be able to use these new tools to help with that, but in the end, I think the analysis that has to happen at NGX would still have to happen here. I don't really see that changing it too much.

Mr. Geng Tan: Okay.

Your company is a Canadian company, but you belong to a bigger U.S. company. Again, this is a follow-up on my first question. When you submit data to our data information system, you also have an obligation to submit the data to your mother company, or even to the national energy data information system in the U.S. Will there be any difference in the requirement of a data submission or how it can affect your...? I'm not sure. I'm just asking you.

Mr. Greg Abbott: You know, with regard to requirements to submit, it's pretty light as to where we must submit data. As we mentioned at the beginning, we are a highly regulated entity, so our regulators have full access to view anything they need to. The CFTC in the United States and the ASC in Canada definitely have the right to get into our data.

As far as being forced to submit our data for publication or utilization by other groups, that's not really there. We choose to publish some data publicly for the betterment, I think, of the industry. As I mentioned, we do have our settlement curves for a rolling five days published on our website. We do publish an average of all the delivered gas in Alberta so that people can calculate royalties and have a more transparent window into how royalty calculations are handled in Alberta. Other than that, we don't really have the requirement to submit data in any other places. There may be aggregators or partners that we do submit data to for use from a commercial perspective, but from a governmental perspective, it's not really forced.

● (1040)

Mr. Geng Tan: If there is a discrepancy between the data provided by the U.S. system and the future—supposing we have one—national energy data system, how are you going to work on this discrepancy? Which data is more useful to you, supposing there is such an institution there?

Mr. Steve Lappin: I think it all comes back to simply...and you're right. You can have discrepancies in data and figures. It's not that one is wrong or right. You just have to appreciate that they are coming from different sources. As we say, there is surveying. Some are based on actual transactions. Then some are based on transactions as well, but are brought about in a different way, maybe through brokerage or bilateral versus screen-traded.

I'm not sure that we see an issue there to the extent that the source is disclosed. If it's simply "here's a source and here's how it's compiled and brought together", it's really up to the users to determine which one they feel is more appropriate for their purposes. I think that's commonplace through the variety of sources, but I think it's just based on what the source is, and it's up to the user.

Mr. Geng Tan: Okay, I have another quick one. Am I done?

The Chair: You're actually a little bit over your time.

I think we're going to stop for the day. The only thing I'm going to float is to ask the committee members to start thinking about topics for the future. Maybe that's something that we can talk about as early as Thursday of this week. I just want to plant the seed.

Richard, do you have a question?

Mr. Richard Cannings: I just want an update on what the timeline for this study is.

The Chair: Hold on one second.

I should thank you, gentlemen, for coming here. You don't need to, nor do you want to, listen to this discussion. We're very grateful for your taking the time early in the morning to join us today. The information you provided was very helpful for our discussion. Thank you again, and enjoy the day in Calgary.

Mr. Steve Lappin: Very good. Thank you. We appreciate it. Thanks for having us.

The Chair: We have witnesses scheduled for Thursday, including Statistics Canada, and then next week as well on June 14. It looks like we'll probably be done next Thursday, possibly Tuesday.

Mr. Richard Cannings: You're saying that we're definitely meeting on Tuesday next week—

The Chair: Yes.

Mr. Richard Cannings: —but that maybe we won't be meeting on Thursday.

The Chair: No, I'm saying that we may be finished with the witnesses and then we can get into the discussion about the parameters of the report.

Mr. Richard Cannings: Do you have any idea of when the minister will appear before us?

The Chair: The invitation has been put out there. His schedule has been full.

Mr. Richard Cannings: I know he's not there next week.

The Chair: I'm following up again, but he hasn't been available during our meeting times so far. I will look into it again, and I'll report back on that as well.

Mr. Jamie Schmale: You can't get anyone from the department ahead of time to—

The Chair: I'll explore all options.

Mr. Jamie Schmale: I don't know about the other members of this committee, but I'm prepared to meet at any time outside the regular meeting to ensure that we arrange the minister to attend this. I'm prepared to go on an evening, earlier in the morning, or whenever. I'm sure the minister has a hole in his schedule that he can make.

The Chair: I will make him aware that we're very flexible.

Mr. Jamie Schmale: Thank you, Mr. Chair.

The Chair: All right.

Thanks. The meeting is adjourned.

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